



Colorado Agricultural Statistics Service

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# **COLORADO SHEEP AND LAMB LOSSES -- 2004**

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Colorado farmers and ranchers lost 33,000 head of sheep and lambs to all causes in 2004, representing a total value of \$3.23 million, according to a survey conducted by the Colorado Agricultural Statistics Service in cooperation with the Colorado Sheep and Wool Authority. No survey was conducted for 2003, but a comparable survey for 2002 indicated that 59,000 head of all sheep and lambs, valued at \$4.27 million, were lost from all causes. The number of head lost was down 44 percent from 2002. The total inventory of all sheep and lambs at the beginning of 2004 was 360,000 head, down 3 percent from the total inventory of 370,000 head at the beginning of 2002. Compared with the beginning inventory for 2002, the 170,000 head of breeding sheep and lambs at the beginning of 2004 was down 17 percent from 205,000 head and the inventory of market sheep and lambs, at 190,000 head, was up 13 percent from 165,000 head. The 2004 lamb crop totaled 165,000 head, down 17 percent from the 2002 lamb crop. Total sheep and lamb death losses in 2004 accounted for 6.2 percent of the available supply of animals during the year compared with losses in 2002 representing 10.1 percent of the available supply.

**Predators** caused an estimated \$1.49 million in losses of sheep and lambs during 2004 compared with a value of \$2.08 million in 2002. They accounted for 15,300 head (46 percent of all losses) in 2004 compared with 28,000 head (47 percent of all losses) in 2002. Predator losses represented 2.9 percent of the available supply in 2004, down from the 4.8 percent of the sheep and lamb supply in 2002. Lamb losses by all predators amounted to 13,100 head in 2004 compared to 20,300 head in the previous survey year. Coyotes, the most damaging predator in each year, were responsible for 63 percent (8,300 head valued at \$754,500) of the lamb losses from predators and 29.6 percent of all lamb losses. Bears and dogs were the next most damaging predators with those two animals claiming a combined total of 2,800 head of lambs and a combined loss value of \$254,500. Bears and coyotes were also the primary predators on sheep, with coyotes killing 1,100 sheep, and bears killing 600 for a combined loss value of \$231,200. Foxes and mountain lions killed 1,000 head of sheep and lambs valued at \$100,000 during 2004, while losses from eagles and bobcats totaled 700 head valued at \$63,700. Eighty-five percent of all predator losses occurred in the Northwest & Mountain and Southwest Districts where all of the major predators were active. All of the state's losses from eagles and bobcats were in those two areas. Coyotes were the major predators in the Northeast District where most of the commercial feedlots are located. Dogs caused the major loss of sheep and lambs from predators in the San Luis Valley and in the Southeast Districts.

The total value of sheep and lamb losses from **non-predator causes** was estimated at \$1.74 million in 2004, down 21 percent from \$2.20 million in 2002. Non-predator losses of 17,700 head in 2004 represented 54 percent of all losses, down from 31,000 head (53 percent) in 2002. For the first time losses to disease was split into four categories: Digestive, Respiratory, Metabolic, and Other Diseases. These accounted for 9,400 head or 63 percent of the total non-predator lamb losses and 34 percent of all lamb losses. Almost 72 percent of all non-predator losses occurred in the Northeast and Northwest Districts. Nearly 49 percent of the non-predator losses occurred in the Northeast District where disease and weather related problems are the major cause of loss in the state's commercial feedlots. Lambing problems accounted for \$168,000 of the total value of the non-predator losses with most of those occurring in the western portions of the state.

**SHEEP & LAMBS: Inventory, Death Losses, and Value of Losses, Colorado, 1998-2004 1**

Year	January 1 Inventory	Lamb Crop	Death Losses					
			Sheep	All Lambs			All Sheep & Lambs	
	All Sheep & Lambs		Total Losses	Before Docking	After Docking	All Lambs	Total Loss	Percent of Supply 2/
	1,000 Head		1,000 Head				Percent	
1998	575	220	10	15	40	55	65	8.0
1999	440	210	8	15	40	55	63	9.5
2000	440	200	9	14	30	44	53	8.1
2002	370	200	13	16	30	46	59	10.1
2004	360	165	5	9	19	28	33	6.2
Year	Total Sheep & Lamb Losses By Cause					Value Of Losses		
	Predator Losses		Non-Predator Losses		Predator	Non-Predator	Total	
	Total Loss	Percent of Supply 2/	Non-Predator	Percent of Supply 2/				
	1,000 Hd.	Percent	1,000 Head		1,000 Dollars			
1998	27.0	3.3	38.0	4.7	1,966.5	2,728.5	4,695.0	
1999	23.0	3.5	40.0	6.0	1,635.5	2,837.5	4,473.0	
2000	19.5	3.0	33.5	5.1	1,492.5	2,523.0	4,015.5	
2002	28.0	4.8	31.0	5.3	2,076.5	2,197.5	4,274.0	
2004	15.3	2.9	17.7	3.3	1,490.0	1,735.0	3,225.0	

1/ No survey was conducted covering 2001 and 2003. 2/ Supply includes sheep and lambs on hand January 1 plus lamb crop plus lamb losses before docking.

**SHEEP AND LAMBS: Number of Head and Value of Loss by Cause, Colorado, 2002 and 2004 1/**

Cause	Sheep				Lambs				Total Sheep & Lambs			
	No. Lost		Value <u>2/</u>		No. Lost		Value <u>2/</u>		No. Lost		Value <u>2/</u>	
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
<b>Predator:</b>	<b>1,000 Head</b>		<b>\$1,000</b>		<b>1,000 Head</b>		<b>\$1,000</b>		<b>1,000 Head</b>		<b>\$1,000</b>	
Bear	3.0	0.6	291.0	81.6	3.3	2.1	216.2	190.9	6.3	2.7	507.2	272.5
Bobcat	0.3	...	29.1	...	0.6	0.2	39.3	18.2	0.9	0.2	68.4	18.2
Coyote	3.5	1.1	339.5	149.6	10.8	8.3	707.4	754.5	14.3	9.4	1,046.9	904.1
Dog	0.1	0.2	9.7	27.2	0.4	0.7	26.2	63.6	0.5	0.9	35.9	90.8
Eagle	...	...	...	...	1.3	0.5	85.2	45.5	1.3	0.5	85.2	45.5
Fox	...	...	...	...	1.4	0.5	91.7	45.5	1.4	0.5	91.7	45.5
Mountain Lion	0.7	0.2	67.9	27.2	1.0	0.3	65.5	27.3	1.7	0.5	133.4	54.5
Other Predator <u>3/</u>	0.1	0.1	9.7	13.6	1.5	0.5	98.3	45.5	1.6	0.6	108.0	59.1
<b>Total Predator</b>	<b>7.7</b>	<b>2.2</b>	<b>746.9</b>	<b>299.0</b>	<b>20.3</b>	<b>13.1</b>	<b>1,329.7</b>	<b>1,191.0</b>	<b>28.0</b>	<b>15.3</b>	<b>2,076.5</b>	<b>1,490.0</b>
<b>Non-Predator:</b>												
Digestive Prob. <u>4/</u>	...	0.2	...	27.2	...	3.8	...	345.4	...	4.0	...	372.6
Respiratory Prob. <u>4/</u>	...	0.1	...	13.6	...	4.7	...	427.2	...	4.8	...	440.8
Metabolic Prob. <u>4/</u>	...	...	...	...	...	0.1	...	9.1	...	0.1	...	9.1
Other Diseases	0.6	0.3	58.2	40.8	10.2	0.2	668.1	18.2	10.8	0.5	726.3	59.0
Weather related	0.4	0.1	38.8	13.6	7.5	1.5	491.3	136.4	7.9	1.6	530.1	150.0
Lambing problems	1.6	0.5	155.2	68.0	2.8	1.1	183.4	100.0	4.4	1.6	338.6	168.0
Old age	1.2	0.6	116.4	81.6	...	...	...	...	1.2	0.6	116.4	81.6
Poisoning	1.1	0.5	106.7	68.0	1.0	0.5	65.5	45.5	2.1	1.0	172.2	113.5
Theft	...	...	...	...	0.3	0.2	19.7	18.2	0.3	0.2	19.7	18.2
Other causes <u>5/</u>	0.4	0.5	38.8	68.0	3.9	2.8	255.5	254.5	4.3	3.3	294.3	322.2
<b>Total Non-Predator</b>	<b>5.3</b>	<b>2.8</b>	<b>514.1</b>	<b>380.8</b>	<b>25.7</b>	<b>14.9</b>	<b>1,683.4</b>	<b>1,354.4</b>	<b>31.0</b>	<b>17.7</b>	<b>2,197.5</b>	<b>1,735.0</b>
<b>Total All Causes</b>	<b>13.0</b>	<b>5.0</b>	<b>1,261.0</b>	<b>680.0</b>	<b>46.0</b>	<b>28.0</b>	<b>3,013.0</b>	<b>2,545.0</b>	<b>59.0</b>	<b>33.0</b>	<b>4,274.0</b>	<b>3,225.0</b>

1/ Sheep value is based on a two year average value per head of ewes 1 year old and older. Lamb value is based on the marketing year average price received for a 90 pound lamb. 2/ Totals may not add due to rounding. 3/ Includes ravens, vultures, wolves and unknown predators 4/ Included in "Other Diseases" for 2002.

5/ Includes unknown non-predator losses.

**SHEEP AND LAMBS: Percent of Head Loss Within Each Agricultural Statistics District, by Type of Predator, Colorado, 2004 1/**

Cause	Agricultural Statistics District						State
	NW & Mountain	Northeast	East Central	Southwest	San Luis Valley	Southeast	
<b>Predator:</b>	<b>Percent</b>						
Bear .....	72.3	0.5	...	25.7	1.5	...	100
Bobcat.....	99.3	...	...	0.7	...	...	100
Coyote .....	71.5	7.5	1.1	13.2	5.0	1.7	100
Dog .....	14.4	...	3.2	11.4	63.9	7.1	100
Eagle.....	99.6	...	...	0.4	...	...	100
Fox.....	80.4	...	...	16.7	2.9	...	100
Mountain Lion .....	62.2	0.2	...	37.6	...	...	100
Other Predators <u>2/</u> .....	19.1	34.9	5.7	30.8	4.0	5.5	100
<b>Total Predator.....</b>	<b>68.4</b>	<b>6.2</b>	<b>1.0</b>	<b>16.6</b>	<b>6.2</b>	<b>1.6</b>	<b>100</b>

1/ Includes all lamb losses both before and after docking.

2/ Includes ravens, vultures, wolves and unknown predators.

**SHEEP AND LAMBS: Percent of Head Loss Within Each Agricultural Statistics District, by Non-predator Causes, Colorado, 2004 1/**

Cause	Agricultural Statistics District						State
	NW & Mountain	Northeast	East Central	Southwest	San Luis Valley	Southeast	
<b>Non-Predator:</b>	<b>Percent</b>						
Digestive Prob.....	2.8	86.4	1.3	5.3	4.1	.1	100
Respiratory Prob.....	1.5	78.2	1.8	7.5	10.5	.5	100
Metabolic Prob.....	8.5	16.1	17.0	46.6	11.8	...	100
Other Diseases.....	63.5	2.7	.5	30.4	...	2.9	100
Weather related causes ....	36.5	28.3	7.0	20.1	3.2	4.9	100
Lambing problems .....	27.6	6.9	8.6	41.1	6.6	9.2	100
Old age .....	10.2	9.2	5.2	43.7	25.8	5.9	100
Poisoning.....	80.9	...	1.3	15.8	.7	1.3	100
Theft.....	20.9	...	...	79.1	...	...	100
Other non-predator 2/....	50.3	25.3	4.4	14.8	3.3	1.9	100
<b>Total Non-Predator .....</b>	<b>22.7</b>	<b>48.9</b>	<b>3.4</b>	<b>16.2</b>	<b>6.5</b>	<b>2.3</b>	<b>100</b>

1/ Includes all lamb losses both before and after docking.

2/ Includes unknown non-predator causes.

**SHEEP AND LAMBS: Percent of Head Loss by Cause and Size of Flock, Colorado, 2002-2004 1/**

Cause	Stock Sheep Operations by Size of Flock						Commercial Feedlots		All Sizes	
	1 - 99		100 - 999		1,000 Plus					
	2002	2004	2002	2004	2002	2004	2002	2004	2002	2004
<b>Predator:</b>	<b>Percent</b>		<b>Percent</b>		<b>Percent</b>		<b>Percent</b>		<b>Percent</b>	
Bear.....	5.1	.4	10.4	3.5	16.6	14.4	...	...	10.8	8.4
Bobcat.....	2.2	...	.2	...	2.4	.8	...	...	1.5	.5
Coyote.....	25.3	19.5	24.4	20.2	32.7	41.7	4.4	5.2	24.3	28.5
Dog.....	2.5	19.4	3.4	1.7	.4	.4	.1	...	.9	2.7
Eagle.....	...	.1	1.5	...	3.8	2.6	...	...	2.2	1.5
Fox.....	.2	.5	1.4	2.3	3.9	1.9	...	...	2.4	1.4
Mountain Lion.....	1.3	4.0	4.0	2.8	4.2	1.3	...	...	2.9	1.5
Other Predator 2/.....	.9	2.0	3.1	2.5	4.1	3.3	...	...	2.7	1.9
<b>Total Predator:.....</b>	<b>37.5</b>	<b>45.9</b>	<b>48.4</b>	<b>33.0</b>	<b>68.1</b>	<b>66.4</b>	<b>4.5</b>	<b>5.2</b>	<b>47.5</b>	<b>46.4</b>
<b>Non-Predator:</b>										
Digestive Prob. 4/.....	...	7.1	...	9.1	...	3.0	...	38.9	...	12.3
Respiratory Prob. 4/.....	...	6.3	...	14.4	...	4.0	...	44.2	...	14.5
Metabolic Prob. 4/.....	...	2.6	...	.5	...	.1	...	...	...	.4
Other Diseases.....	13.2	3.3	18.6	3.1	2.5	1.3	56.7	...	18.4	1.4
Weather related.....	17.7	5.9	7.6	6.7	9.6	4.1	22.6	4.2	13.3	4.6
Lambing problems.....	14.1	11.1	10.4	12.3	8.8	4.1	...	...	7.4	4.9
Old age.....	7.6	5.4	6.3	8.4	1.1	.8	...	...	2.1	2.0
Poisoning.....	1.9	1.3	.7	2.1	6.1	4.2	...	.7	3.6	2.9
Theft.....	...	...	.7	...	.8	.9	...	.6	.5	.6
Other non-predator 3/.....	8.0	11.1	7.3	10.4	3.0	11.1	16.2	6.2	7.2	10.0
<b>Total Non-Predator.....</b>	<b>62.5</b>	<b>54.1</b>	<b>51.6</b>	<b>67.0</b>	<b>31.9</b>	<b>33.6</b>	<b>95.5</b>	<b>94.8</b>	<b>52.5</b>	<b>53.6</b>
<b>Total All Causes.....</b>	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

... = none reported or less than .05 percent of the total. 1/ Includes lambs before and after docking. 2/ Includes ravens, vultures, wolves and unknown predators. 3/ Includes unknown non-predator causes. 4/ Included in "Other Diseases" for 2002.